Form 8130-3
The Airworthiness Approval Tag worth waiting for
By Bill O'Brien

On January 3 a new FAA "Form" was born. The form's assigned FAA No. is 8130-3, and it was christened "The Airworthiness Approval Tag."
The form's father was the "harmonization" process (Code name: global hug) that is going on right now between the Joint Aviation Authorities (JAA) in Europe and the FAA. The form's biological mother was FAA Order 8130.21A, with mid wife duties performed by AIR-200. These are folks that work the manufacturing side of the Aircraft Certification Service here in Washington.

What Can The New Form Do?

Unlike most new government forms that are as welcome by the public as mud slides in California, this "form" was eagerly awaited by the aviation industry because this particular form is a multitalented child that can do the following amazing things.

1. It can be used to make a conformity determination for Class II and Class III products.
2. It can be used in the identification of "new" parts and products that are being shipped.
3. It can be used as an export airworthiness approval for Class II and Class III products.
4. Or it can serve as a return to service after maintenance, preventive maintenance, and alteration.

The FAA designed this form in cooperation with other Civil Air Authorities (CAA). For example the 8130-3 Form and the JAA Form One are now equivalent. It is FAA's hope that, "in time," this single form will be all that is required to ship a Class II or Class III aviation part from a repair station or a distributor in Kalispell, MT, to customers in Phoenix, AZ, or London, England.
To fully understand the new form's potential all of us will first have to change some of the old concepts on how to ship or approving parts for return to service.
For example, if you are going to ship new or newly overhauled parts, start thinking of the 8130-3 Form as the part's "birth certificate." The form will serve as the part/component's birth certificate and follow the part throughout its service life.
When you use a 8130-3 Form as "approving a component for return to service" the form is no longer a birth certificate but an "adoption certificate" by which the air carrier or repair station assumes all airworthiness responsibility for any minor or major repair or alterations it performs on the part until that part is again repaired, replaced, altered, or inspected.

Disclaimer

The FAA has designed the 8130-3 Form to become the form for shipment of parts and components and for "approval for return to service." I must caution you, that even though 8130-3 is recognized by many countries it often doesn't satisfy all export paperwork.
This is primarily because we don't have global Bilateral Airworthiness Safety Agreements (BASA) in place with all foreign countries. We do have "firm handshake agreements" with many CAAs, but no BASAs have been signed as of this date. So for the time being, and depending on what you're shipping and where you're shipping it to, there may be other FAA and Civil Air Authorities requirements that have to be met in addition to filling out Form 8130-3. Please check Advisory Circular 21-2G (Export Airworthiness Approval Procedures, dated 7/9/92) and your local FAA Flight Standards District Office (FSDO) for the latest information on export airworthiness approval procedures.

What Can 8130-3 Be Used For?

Before we cover the four uses of 8130-3, it might be helpful to review the definitions of words used on the form.
FAR Part 21.321 defines “newly overhauled” as products that have been overhauled, but except for testing, have not been placed in service.
FAR Part 21.321 also defines Class II and Class III products. A Class II product is a major component of an aircraft, aircraft engine, or propeller that if it fails will jeopardize the safety of that aircraft, engine, or propeller. A Class II product is also considered to be any product that has been approved and manufactured under a Technical Standard Order (TSO).
A Class III product is defined generally as a small part or minor assembly whose failure would not jeopardize the safety of the aircraft.
Most Class II and Class III products are easy to identify. For example, a replacement cylinder for a IO-360 Lycoming engine is a Class II, while standard rocker box gaskets, fasteners, and parts such as AN, NAS, and SAE hardware are Class III products. However, if you’re not sure of a particular part, call the local FSDO for a determination.
Don’t jump to the conclusion that the FAA considers a Class III part a minor player in the overall airworthiness of the aircraft; or that a missing screw here and a stripped bolt there won’t affect the airworthiness condition of an aircraft. The Class II and III definition for a part or product is for export/shipping purposes only — not for airworthiness determination.

Form 8130-3 for Conformity Determination
A conformity determination is an examination and/or testing of a part to determine that it conforms to specified data. The 8130-3 Form should be used by manufacturers for a conformity determination only at the request of the importing country’s CAA and only for new or newly overhauled parts. When the form is used for conformity certification of “prototype” products, a Statement of Conformity (FAA Form 8130-9) from the manufacturer and a Conformity Inspection Record (FAA Form 8100-1) may be required to meet type certification program requirements.

Form 8130-3 for Identification of New Products
This is where aviation parts manufacturers can use the form as a birth certificate for their new parts and components. Signing and attaching a form to each of their products before they ship them out to customers or distributors will help ensure the part’s traceability and accountability.
A secondary benefit in these days of unapproved, bogus, and counterfeit parts is: use of the 8130-3 will give technicians at the other end of the parts supply chain a warm and fuzzy feeling that the parts have been properly identified as genuine aviation parts.
Manufacturers who wish to use the 8130-3 Form for parts identification purposes must first revise their quality system procedures before incorporating it into their system.

Form 8130-3 for Export Airworthiness Approval for New or Newly Overhauled Products
Class II products: Federal Aviation Regulation 21.323 provides that any exporter or exporter’s representative may obtain an export airworthiness approval for a Class II product.
In other words, any manufacturer, distributor, or private citizen can ship Class II parts as long as the 8130-3 Form is signed by either the FAA inspector or an appropriately authorized FAA designee such as a Designated Manufacturing Inspection Representative (DMIR) or a Designated Airworthiness Representative (DAR), or an Organizational DAR.
This question is bound to come up. “What about part distributors, with thousands of new or newly overhauled parts sitting on shelves and all of them conspicuously naked of the new 8130-3 Forms; how are they going to ship these parts overseas?”
Answer: At this time, for domestic shipping you don’t need the form. However, if you ship overseas many countries give you two choices. Either have the manufacturer give you a signed

8130-3 Form for the part, or have an appropriately authorized Designated Airworthiness Representative (DAR) sign off a form for each part you want to ship overseas.
Class III products: Only manufacturers, or their authorized suppliers, that hold a production certificate, an Approved Production Inspection System (APIS), a Parts Manufacturer Approval (PMA), or a Technical Standard Order (TSO) authorization to make a Class III product (e.g. NAS Hardware) with a Designated Manufacturer's Inspection Representative in their employ, can sign 8130-3.

Form 8130-3 for Export Airworthiness Approval for Used Products
The part of the form for export airworthiness approval for used products should become quite rare in the future. This is because the majority of the countries covered in AC21-2 have indicated that they will accept the form for used products only if it's signed by an air carrier or a repair station. In other words, the foreign civil air authorities prefer that U.S air carriers or repair stations take responsibility for approving used parts for return to service, not, for example, parts distrib-

utors, that may just be shipping parts overseas that were removed from parted out aircraft. However, if you should desire to ship a part without the benefit of a signiture by an air carrier or repair station, you'll have to take these additional steps:
(1) You'll need a statement from the importing foreign Civil Aviation Authority that it is willing to accept the part (ref. FAR 21.325(c), Export Airworthiness Approval Exceptions).
(2)The application for exemption must be accompanied by a written statement listing any requirement that the part does not meet, (ref. FAR 21.327(e)(4), FAR 21.331(b), and FAR 21.333(b)).

Form 8130-3 for an Approval for Return to Service
8130-3 can be used as an approval for return to service for Class II and Class III products after performing maintenance or alterations, as long as the work accomplished was performed by either an air carrier holding a Part 121 or Part 135 operating certificate or a Part 145 repair station, and the form has all the information required by FAR Part 43.9 Maintenance record entries.
OK, what does this mean? Right now the form is optional if you ship state-side. For example, if you are a repair station or an air carrier and you repair a APU you can ship it to your customer in Philadelphia using the same procedures presently called out in your manual.
However, if you are shipping parts overseas, the vast majority of the importing countries now require a FAA Form 8130-3 to accompany the part.
Employing two separate procedures (domestic and oversees) for "approval for return to service " is not cost effective, so I recommend that you consider making some changes to your manual and quality control systems to incorporate the use of the new 8130-3 Form.

Minor Repairs and Alterations
If you are an air carrier or a FAA repair station and you're shipping Class II or Class III parts locally or worldwide after making a minor repair or a minor alteration, then in most cases, filling out the form is the only paperwork you have to generate.
This is because the approval for return to service statement and additional information on the 8130-3 Form meets FAR 43.9 record-keeping requirements for maintenance.

Major Repairs and Alterations

If an air carrier or the repair station performs a major repair or a major alteration on a Class II or Class III product, and it will be shipped either locally or worldwide it still has to comply with FAR 43.9.
For example, if a major repair or alteration was performed by an air carrier on a fuel control servo then Form 337 or required air carrier records must be attached to the 8130-3 Form.
If a repair station performs a major repair or alteration on a Class II or Class III product then it has a choice of either attaching a Form 337 or a signed copy of the work order as required in Appendix B of Part 43 to the 8130-3 Form.
In any case when a Federal Aviation Regulation requires an additional form like a Form 337 to be attached, then all forms and the dates the forms were issued/approved must be identified in the remarks section on the 8130 Form.

Rules of thumb for filling out a 8130-3 Form:
1. The 8130-3 Form must be made in duplicate. The original accompanies the part and the other copy is kept in a secure file at the repair facility for at least two years.
2. If the 8130-3 Form has been issued for one function, for example: part identification, it must be reissued if you are going use it for another function; like approving a part for return to service and then exporting the part overseas.
3. Block 3 on the form makes a murky reference to a “System Tracking Reference” number that is FAA approved. This means that the repair station or air carrier has the responsibility to come up with a 8130-3 Form tracking system that includes a means of cross-referencing number(s) and products(s) being shipped. The number tracking system should then be identified and explained in a revision to the repair station’s or air carrier’s manual.
Then all an air carrier or repair station has to do to have an FAA approved “System Tracking Number” is to get the manual revision approved by the local FAA district office.
4. The 8130-3 Form can be computer generated; it can also be reduced in size to fit a logbook page, but don’t make it so small that your customer will need an electron microscope to read it. You are also allowed to preprint some of information such as the organization name or sequenced tracking numbers. However, you are not allowed to change, add to, or alter, either the 8130-3 Form’s words or format. If you do mess around with the form, your government will hurt you.
5. If the Form 8130-3 is use for airworthiness approval or conformity determination, a separate form may be issued for each part number, or a single form with multiple part numbers may be used. Multiple items should be numbered in sequence. If a separate list is used enter the words “List Attached” in Block 7 of the form.
6. When the form is used as an approval for return to service you must fill out the Remarks section of the form with the data required by FAR 43.9 as follows:
a) A description of the work performed
b) The date of completion of the work performed
c) The name of the person performing the work
In addition you should identify the type certificate product that you removed the part from by listing its TC number.
7. Remember, the 8130-3 Form can be used for either shipping or approval for return to service after maintenance for Class II or Class III products, but not for both functions at the same time.
If you are using it to ship a part (Export, Conformity, or Identification) then fill out only Blocks 14 through 18.
If you are approving a part for return to service then fill out Blocks 19 through 23. If you fill out all the blocks on the form you will incur global bureaucratic wrath.